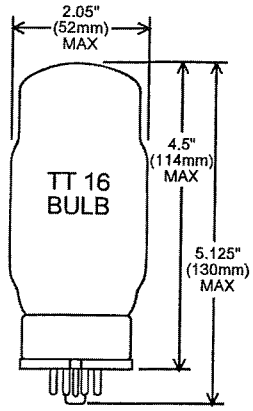
TUNG-SOL

PENTODE

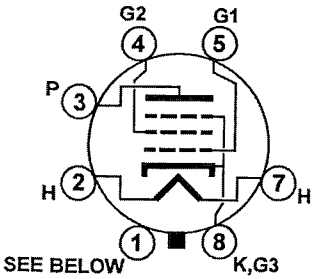


GLASS BULB
LARGE WAFER OCTAL
WITH BARRIERS
7 PIN LOW LOSS B7-99

FOR
AUDIO SERICE APPLICATIONS

OXIDE COATED INDIRECTLY HEATED
UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION



BOTTOM VIEW

BASING DIAGRAM
JEDEC 7AC
PIN 1 - NO CONNECTION
OR BASE SHELL

THE KT120 IS A BEAM PENTODE POWER AMPLIFIER PRIMARILY DESIGNED FOR AUDIO SERVICE. IT CARRIES A 60 WATT PLATE DISSIPATION RATING WHICH PROVIDES FOR PUSH-PULL AMPLIFIER DESIGNS UP TO 200 WATTS OUTPUT. CONSTRUCTION FEATURES PROVIDE FOR RELIABLE OPERATION AT FULL RATINGS.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT SHIELD

GRID 1 TO PLATE	1.8	pf
INPUT	29	pf
OUTPUT	10	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTCS	6.3	VOLTS	1.7 - 1.95	AMP
HEATER SUPPLY LIMITS VOLTAGE OPERATION			6.3 +/- 0.6	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE HEATER NEGATIVE WITH RESPECT TO CATHODE TOTAL DC AND PEAK			300	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE TOTAL DC AND PEAK			200	VOLTS

CONTINUED ON FOLLOWING PAGE

→ INDICATES A CHANGE

PRINTED IN U.S.A.

KT120

TUNG-SOL

CONTINUED FROM PREVIOUS PAGE

MAXIMUM RATINGS

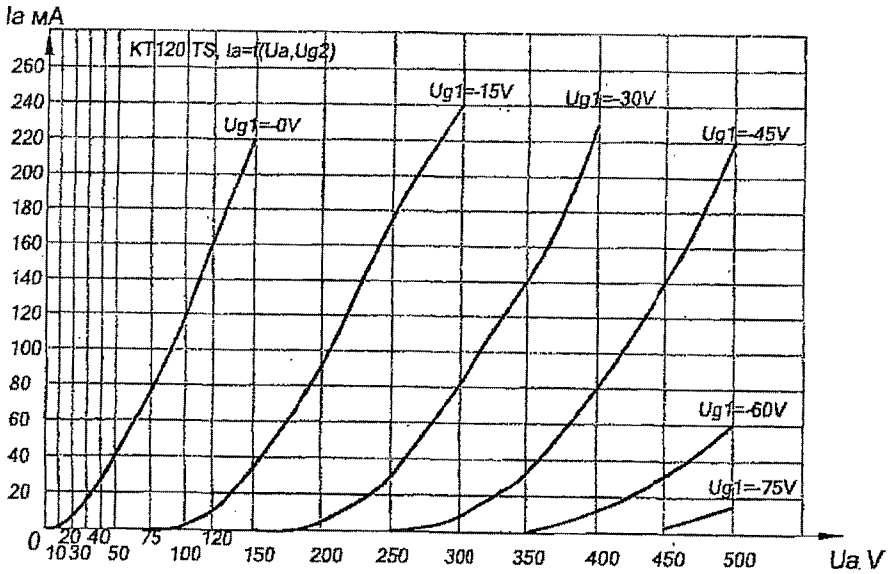
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

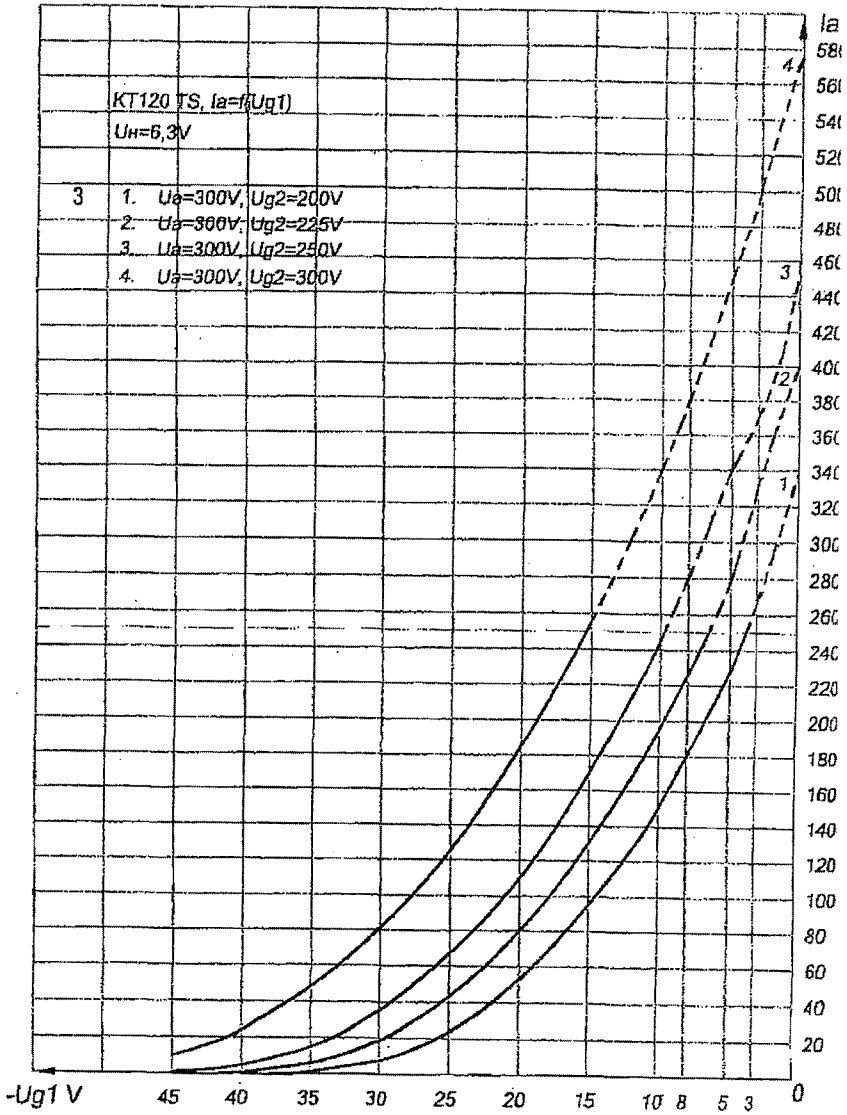
PLATE VOLTAGE, DC		
TETRODE	850	VOLTS
TRIODE	650	VOLTS
GRID 2 VOLTAGE, DC		
PENTODE CONNECTION	650	VOLTS
TRIODE & ULTRALINEAR CONNECTION	600	VOLTS
GRID 1 VOLTAGE, DC	-200	VOLTS
PLATE DISSIPATION	60	WATTS
GRID 2 DISSIPATION	8.0	WATTS
CATHODE CURRENT		
PENTODE CONNECTION	250	MA
TRIODE & ULTRALINEAR CONNECTION	230	MA
GRID 1 CIRCUIT RESISTANCE		
FIXED BIAS	51,000	OHMS
SELF BIAS	240,000	OHMS
BULB TEMPERATURE	250	CELSIUS

AVERAGE CHARACTERISTICS

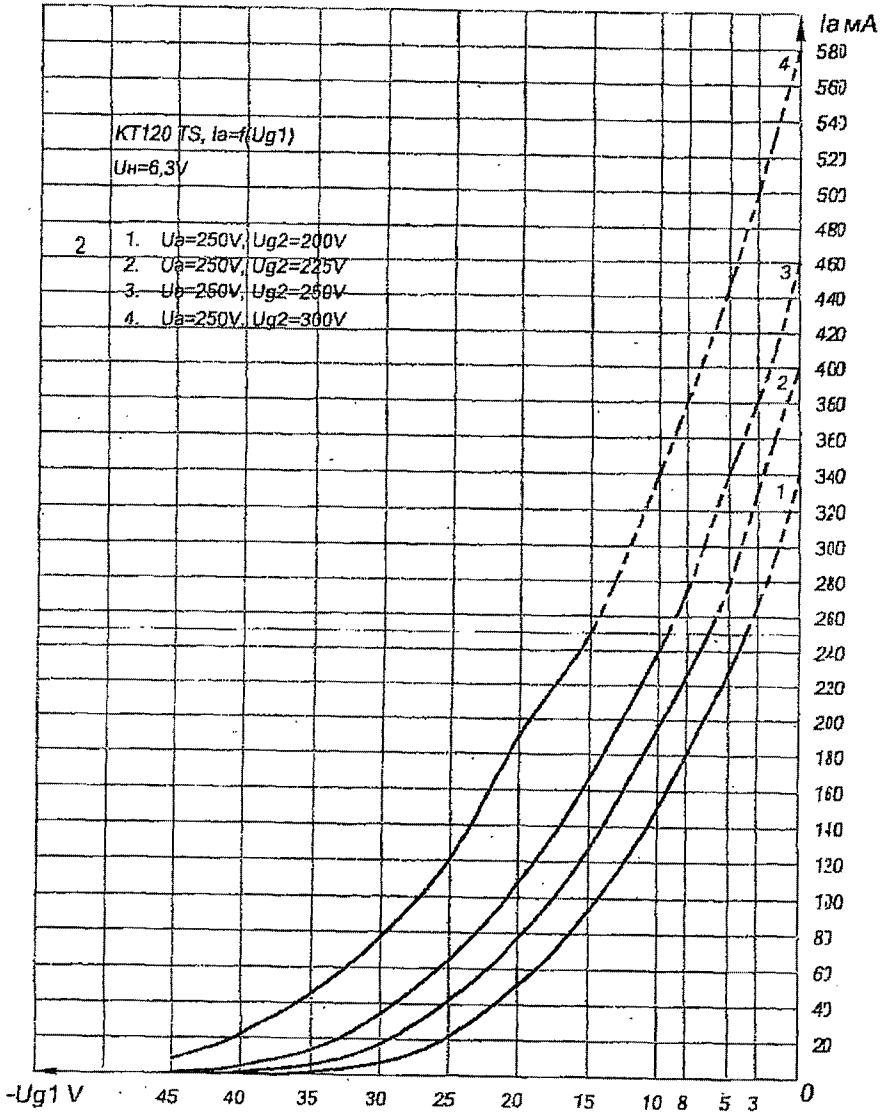
CLASS A1 AUDIO AMPLIFIER - SINGLE TUBE

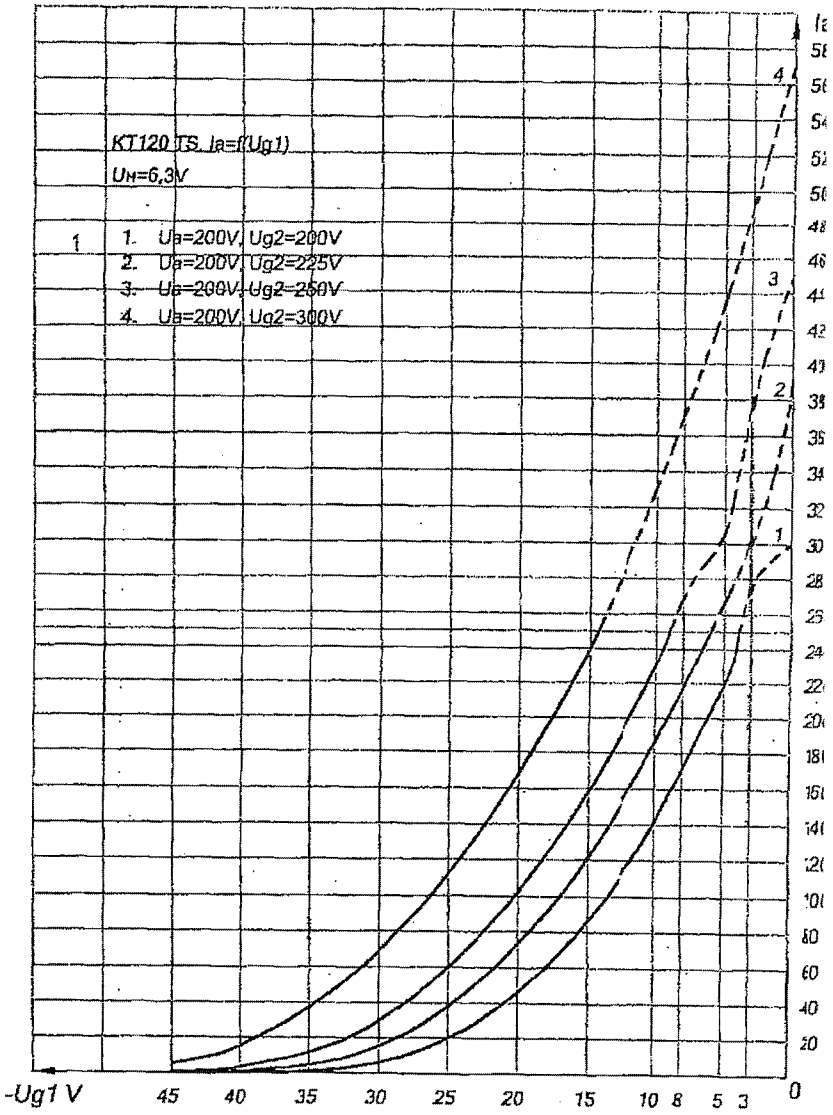
PLATE VOLTAGE	400	VOLTS
GRID 2 VOLTAGE	225	VOLTS
GRID 1 VOLTAGE	-14	VOLTS
PLATE CURRENT (RANGE)	135 - 165	MA
GRID 2 CURRENT (NOT MORE THAN)	14	MA
TRANSCONDUCTANCE (NOT LESS THAN)	12.5	mA/V
PLATE RESISTANCE (APROX.)	3000	OHMS
MAX. SIGNAL POWER OUTPUT (NOT LESS THAN)	20	WATTS
TOTAL HARMONIC DISTORION (NOT MORE THAN)	14	PERCENT
CATHODE TO HEATER LEAKAGE (NOT MORE THAN) (WITH ±300V HEATER TO CATHODE DIFFERENCE)	30	uA


Ia мА
KT120 TS, Ia=f(Ua,Ug2)
Ug1=-0V
Ug1=-15V
Ug1=-30V
Ug1=-45V
Ug1=-60V
Ug1=-75V
Ua V

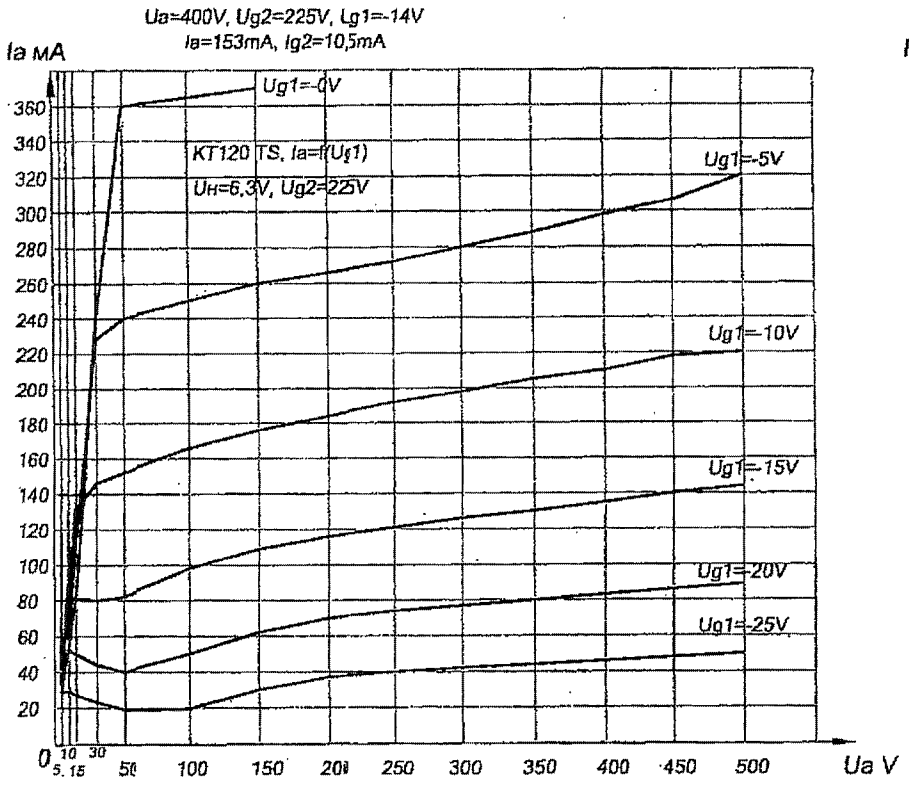

KT120 TS, Ia=f(Ug1)
Uн=6,3V
1. Ua=300V, Ug2=200V
2. Ua=300V, Ug2=225V
3. Ua=300V, Ug2=250V
4. Ua=300V, Ug2=300V
Ia
-Ug1 V

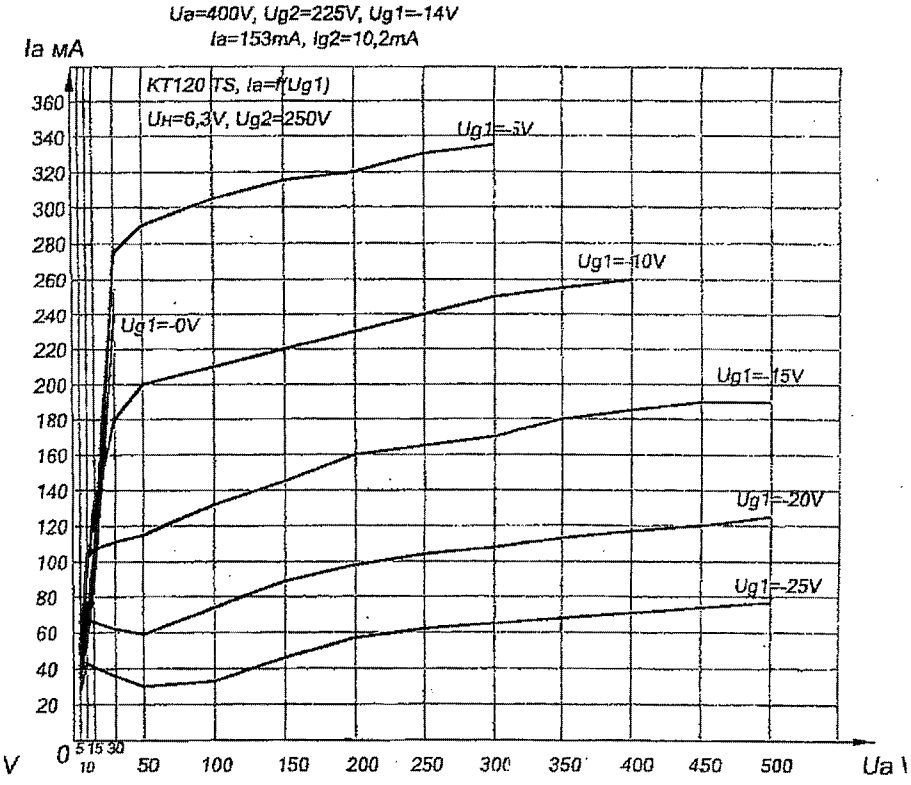
26.01.2010г


Ia мА
KT120 TS, Ia=f(Ug1)
Uн=6,3V
2
1. Ua=250V, Ug2=200V
2. Ua=250V, Ug2=225V
3. Ua=250V, Ug2=250V
4. Ua=250V, Ug2=300V
-Ug1 V
45 40 35 30 25 20 15 10 8 5 3 0


KT120 TS, Ia=f(Ug1)
Uн=6,3V
1
1. Ua=200V, Ug2=200V
2. Ua=200V, Ug2=225V
3. Ua=200V, Ug2=250V
4. Ua=200V, Ug2=300V
-Ug1 V
45 40 35 30 25 20 15 10 8 5 3 0

16. 01. 2010г.


Ua=400V, Ug2=225V, Ug1=-14V
Ia=153mA, Ig2=10,5mA
Ia мА
KT120 TS, Ia=f(Ug1)
UH=6,3V, Ug2=225V
Ug1=-0V
Ug1=-5V
Ug1=-10V
Ug1=-15V
Ug1=-20V
Ug1=-25V
Ua V


Ua=400V, Ug2=225V, Ug1=-14V
Ia=153mA, Ig2=10,2mA
Ia мА
KT120 TS, Ia=f(Ug1)
UH=6,3V, Ug2=250V
Ug1=-5V
Ug1=-10V
Ug1=-0V
Ug1=-15V
Ug1=-20V
Ug1=-25V
Ua V

26.04.2010г